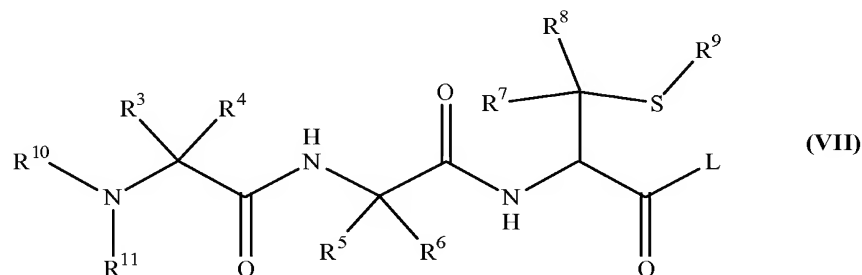


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-20. (canceled)
21. (previously presented) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} includes a radionuclide selected from ^{99m}Tc, ⁹⁹Tc, ⁶⁴Cu, ⁶⁷Cu, ⁹⁷Ru, ¹⁰⁹Pd, ¹⁸⁶Re, ¹⁸⁸Re, ¹¹¹In, ^{113m}In, ¹⁵³Gd, ⁹⁰Y, ¹⁵³Sm, ¹⁶⁶Ho, ¹⁹⁸Au, ¹⁹⁹Au, ⁹⁰Sr, ⁸⁹Sr, ¹⁰⁵Rh, ²⁰¹Tl, ⁵¹Cr, ⁶⁷Ga, ⁵⁷Co, ⁶⁰Co, ¹²³I, ¹²⁵I, ¹³¹I or ¹⁸F.
22. (previously presented) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} includes a radionuclide selected from the group consisting of Tc and Re.
23. (previously presented) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} is a metal chelate of a radioactive or paramagnetic metal ion.
24. (withdrawn) The amyloid-targeting imaging agent of claim 31, wherein A_{lab} comprises a chelating ligand of the formula

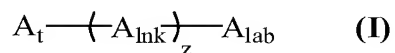


where R¹⁰ is a linear or branched, saturated or unsaturated C₁₋₄ alkylene group interrupted by one or two heteroatoms; R¹¹ is H or R¹⁰, or R¹⁰ and R¹¹ taken together, form a 5- to 8-membered saturated or unsaturated heterocyclic ring optionally substituted with one or more of halogen, hydroxyl, amino, carboxyl, oxo, C₁₋₄ alkyl, aryl, or C(O)R groups; R³, R⁴, R⁵ and R⁶ are independently H, carboxyl, C₁₋₄ alkyl, an alpha carbon side chain of a D- or L-amino acid other than proline, or C(O)R; R⁷ and R⁸ are independently H,

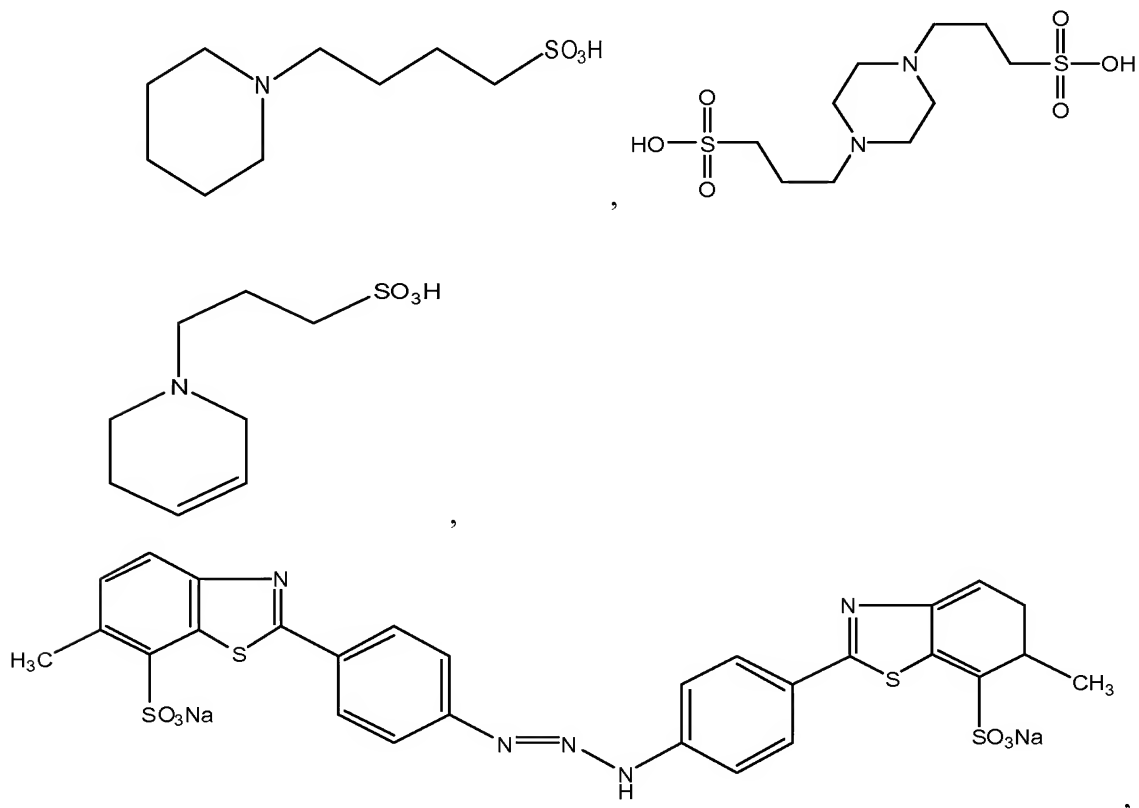
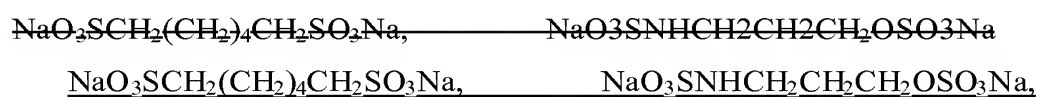
carboxyl, amino, C₁₋₄ alkyl, C₁₋₄ alkyl; R⁹ is H or a sulfur protecting group; and L is hydroxyl, alkoxy, an amino acid residue, or a linking group.

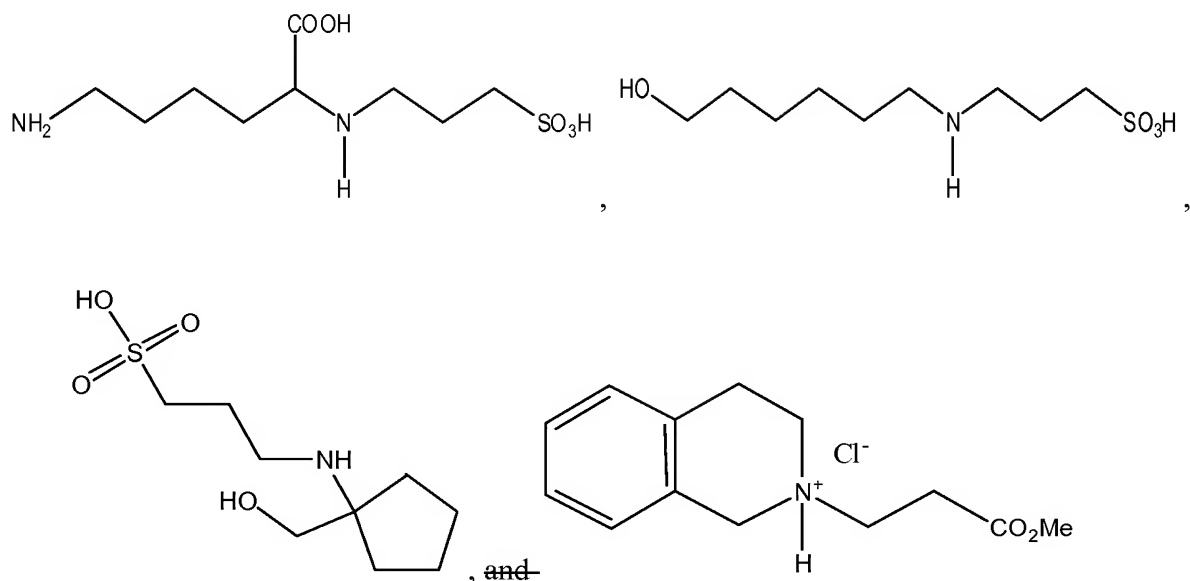
25-30. (canceled)

31. (currently amended) An amyloid-targeting imaging agent of the formula



where z is 0 or 1; A_t is an amyloid targeting moiety selected from the group consisting of





and pharmaceutically acceptable salts thereof;

A_{link} is a linker moiety; and A_{lab} is a labeling moiety.

32-42. (canceled)

43. (previously presented) A kit for preparing a radiopharmaceutical preparation, said kit comprising:
- an amyloid-targeting imaging agent of claim 31;
 - a reducing agent;
 - a buffering agent;
 - a transchelating agent, and
- instructions for the preparation and use of the radiopharmaceutical in the imaging of amyloid or an amyloid-related condition.

44-50. (canceled)

51. (withdrawn) A method of diagnostic medical imaging of an amyloid-associated disease comprising the steps of administering to a patient a pharmaceutical composition according to claim 31 and then imaging said patient.
52. (withdrawn) The method of diagnostic medical imaging according to claim 51 wherein A_{lab} of said pharmaceutical composition is a radiopharmaceutical.

- 53. (withdrawn) The method of diagnostic medical imaging according to claim 51 wherein A_{lab} of said pharmaceutical composition is a metal chelate.
- 54. (withdrawn) The method of diagnostic medical imaging according to claim 53 wherein said metal chelate is gadolinium-DTPA, gadolinium-DOTA, or gadolinium-DO3A.
- 55. (withdrawn) The method of diagnostic medical imaging according to claim 53 wherein said metal chelate is a chelate of ^{99m}Tc or ^{111}In .
- 56. (withdrawn) The method of diagnostic medical imaging according to claim 51 wherein said imaging step is ultrasound imaging.
- 57. (withdrawn) The method of claim 105, wherein said imaging step is radionuclide imaging.
- 58. (withdrawn) The method of claim 57, wherein said imaging step is SPECT imaging.
- 59. (withdrawn) The method of claim 105, wherein said imaging step is magnetic resonance imaging.
- 60. (withdrawn) The method of claim 105, wherein said imaging step is ultrasound imaging.
- 61. (withdrawn) The method of claim 105, wherein said imaging step is X-ray imaging.
- 62. (withdrawn) The method of claim 105, wherein said imaging step is fluorescence imaging.
- 63-94. (canceled)
- 95. (withdrawn) A method for diagnostic medical imaging of an amyloid-associated disease in a patient, comprising administering to a patient a pharmaceutical composition comprising an amyloid-targeting imaging agent of claim 31, and imaging the amyloid-targeting imaging agent in said patient.
- 96. (withdrawn) The method of claim 95, wherein A_{lab} of said pharmaceutical composition is a radiopharmaceutical.

97. (withdrawn) The method of claim 95, wherein A_{lab} of said pharmaceutical composition is a metal chelate.
98. (withdrawn) The method of claim 95, wherein A_{lab} of said pharmaceutical composition is a metal chelate and said imaging step is magnetic resonance imaging or radionuclide imaging.
99. (withdrawn) The method of claim 97, wherein said metal chelate is gadolinium-DTPA, gadolinium-DOTA, or gadolinium-DO3A.
100. (withdrawn) The method of claim 97, wherein said metal chelate is a chelate of ^{99m}Tc or ^{111}In .
101. (withdrawn) The method of claim 95, wherein said imaging step is ultrasound imaging.
102. (canceled)
103. (withdrawn) A method for diagnosing an amyloid-related condition in a patient, comprising administering an amyloid-targeting imaging agent according to claim 31 to a patient, and imaging said amyloid-targeting imaging agent in said patient to determine the presence of amyloid in said patient, such that the presence or absence of an amyloid-related condition in said patient is determined.
104. (withdrawn) The method of claim 103, wherein said amyloid-related condition is selected from the group consisting of Creutzfeld-Jakob Disease (CJD), Kuru, transmissible cerebral amyloidosis-amyloidosis, ~~(also known as transmissible virus dementias[[]])~~, familial CJD, scrapie, transmissible mink encephalopathy, bovine spongiform encephalopathy (BSE), inflammation-associated amyloid, type II diabetes, primary amyloidosis, feline spongiform encephalopathy, non-transmissible cerebral amyloidosis (e.g., Alzheimer's disease), prion-mediated diseases, dialysis-related amyloidosis, light chain-related amyloidosis, cerebral amyloid angiopathy, and Alzheimer's disease.
105. (withdrawn) A method for imaging amyloid deposition in a patient, comprising administering an amyloid-targeting imaging agent according to claim 31 to a patient, and

imaging said amyloid-targeting imaging agent in said patient to determine the presence of amyloid in said patient.

106-131. (canceled)

132. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



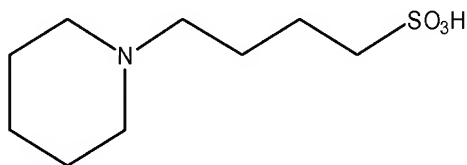
or a pharmaceutically acceptable salt thereof.

133. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



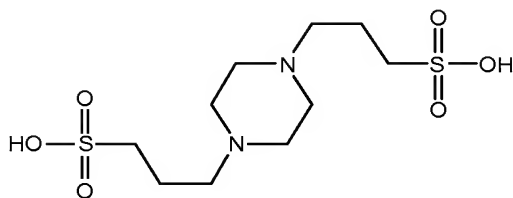
or a pharmaceutically acceptable salt thereof.

134. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



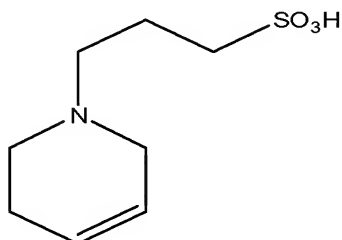
or a pharmaceutically acceptable salt thereof.

135. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



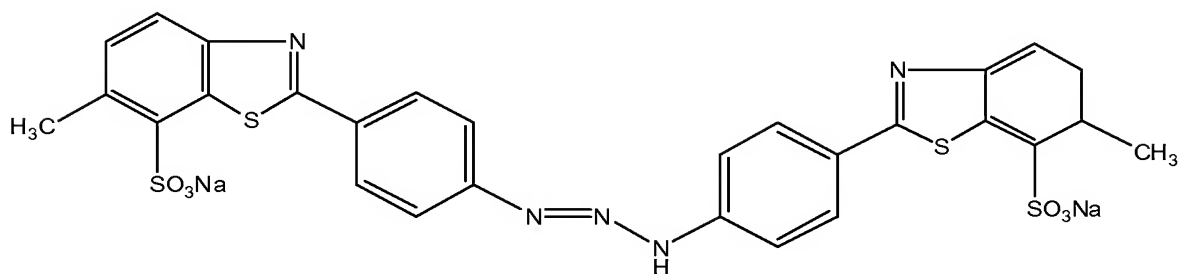
or a pharmaceutically acceptable salt thereof.

136. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



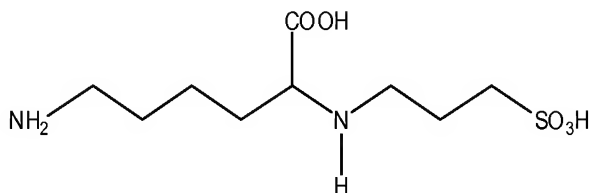
or a pharmaceutically acceptable salt thereof.

137. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



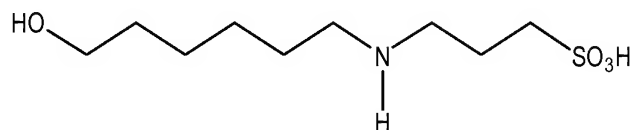
or a pharmaceutically acceptable salt thereof.

138. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



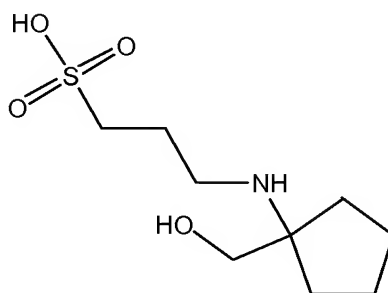
or a pharmaceutically acceptable salt thereof.

139. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



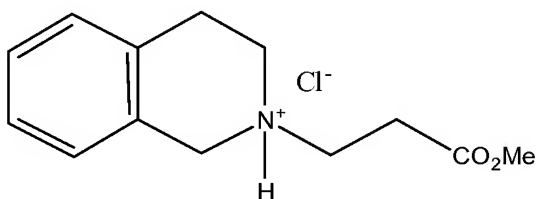
or a pharmaceutically acceptable salt thereof.

140. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



or a pharmaceutically acceptable salt thereof.

141. (currently amended) The amyloid-targeting imaging agent of claim 31, wherein the amyloid targeting moiety is of the formula



or a pharmaceutically acceptable salt thereof.